



EMBASSY OF THE UNITED STATES
INTERNATIONAL NARCOTICS AND
LAW ENFORCEMENT
BOGOTA, COLOMBIA

NOTICE:
THIS DOCUMENT IS THE PROPERTY OF THE U.S. GOVERNMENT. FURTHER REPRODUCTION AND/OR DISTRIBUTION IS PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT SECTION, BOGOTA, COLOMBIA. INFORMATION ON THIS DOCUMENT IS NOT TO BE ALTERED EXCEPT WITH THE WRITTEN APPROVAL OF THE OFFICE.

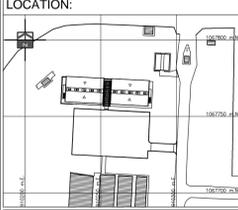
MANAGED BY:
I.N.L.
INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT EMBASSY OF THE UNITED STATES, BOGOTA, COLOMBIA

COR:
ENGINEER FRANCISCO CABRERA



PROJECT:
A&E DESIGN FOR A NEW LODGING BUILDING AT THE CNP AVIATION SCHOOL IN MARIQUITA, TOLIMA.

CONTRACT NUMBER: SCO150-13-M-0291
CONTRACT DATE: JANUARY 28, 2013



LEGEND:
NO LEGEND APPLY

OBSERVATIONS:
ALL LEVELS AND DIMENSIONS MUST BE VERIFIED ON SITE BY THE BUILDING CONTRACTOR.
ALL UNITS ARE IN METRIC SYSTEM.

REVISIONS:

No.	SUBMITTAL	DATE
1	10% SUBMITTAL	12.02.2013
2	35% SUBMITTAL	08.03.2013
3	60% SUBMITTAL	08.03.2013
4	90% SUBMITTAL	25.04.2013
5	100% SUBMITTAL	13.06.2013

PHASE: 10% 35% 60% 90% 100%

CONTENIDO:
PLANTA CIMENTACION
PLANTA PRIMER PISO

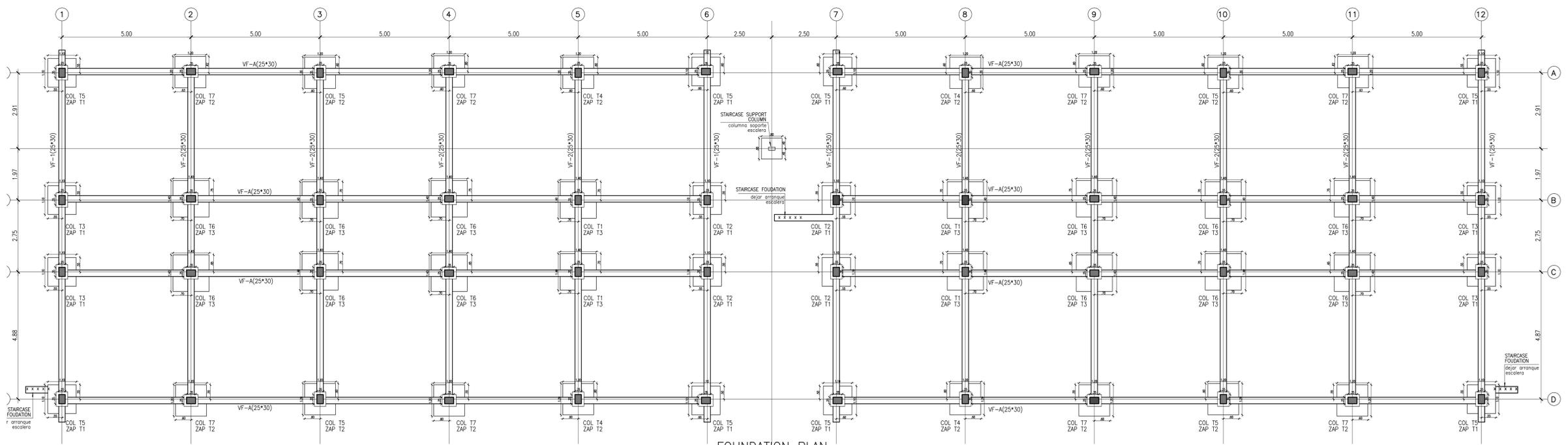
CONTENTS:
FOUNDATION PLAN
FIRST FLOOR PLAN

SHEET PLAN: 77-S-1-2-3-4-5-6.dwg SCALE: IND

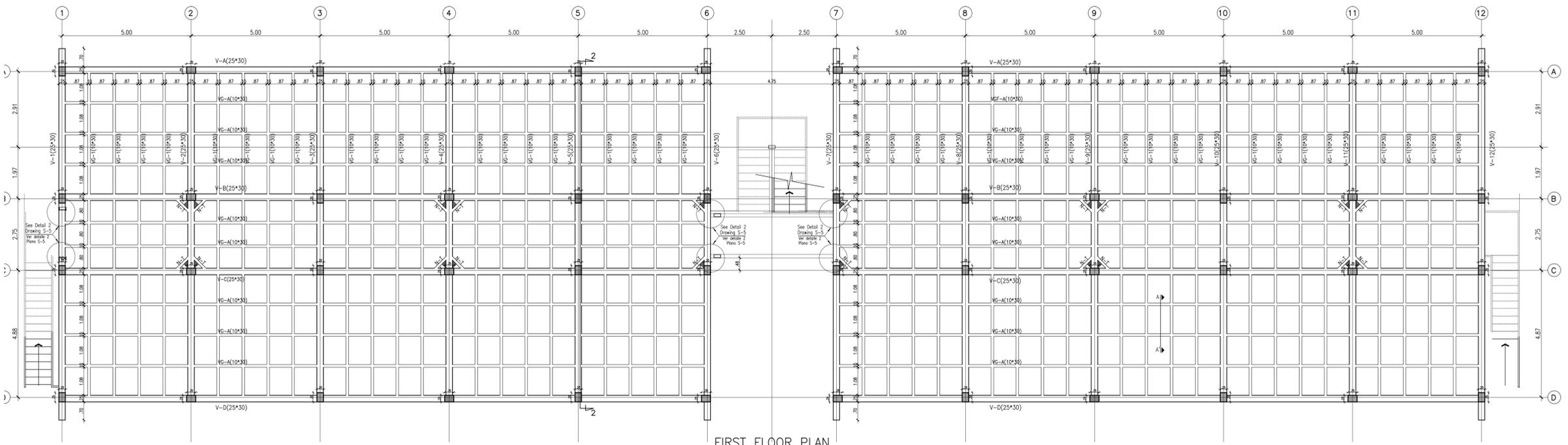
SHEET: **S-1** DESIGNED BY: **Dr. Juan Carlos A. A&E**

PROFESION: **Structural Engineer**
PROFESSIONAL CARD: **05202 18878 ANT**
SIGNATURE:

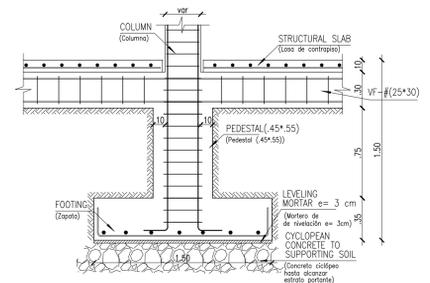
DRAWING DATE: **JUNE 13/2013**



FOUNDATION PLAN
PLANTA CIMENTACION
LEVEL 0 / NIVEL 0



FIRST FLOOR PLAN
PLANTA PISO 1
LEVEL 1 / NIVEL 1



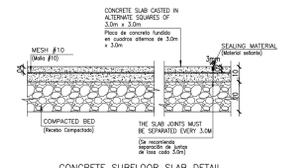
NOTE: Cyclopean concrete must be used when the existing supporting ground level specified by the soil survey is below the footing level.
Nota: se usara concreto ciclopeo cuando por los niveles del terreno actual, la cimentacion no este apoyada al nivel especificado por el Ing. de Suelos.

DIMENSIONAL CHARACTERISTICS MESHES (CARACTERISTICAS DIMENSIONALES DE MALLAS)

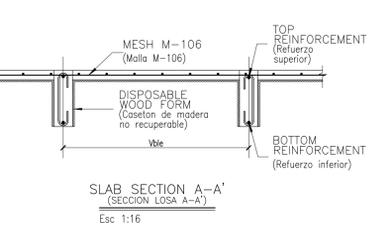
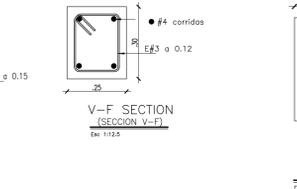
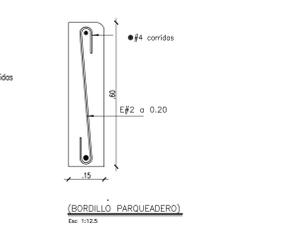
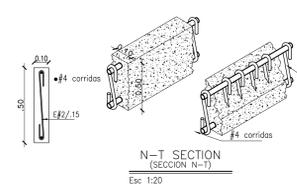
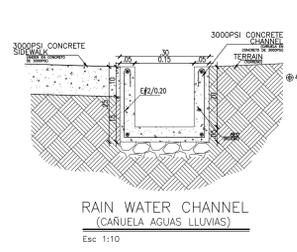
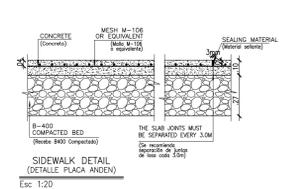
REFERENCE (REFERENCIA)	REFERENCE DIACO (REFERENCIA DIACO)	DIAMETER ROD (mm) (Diámetro varillas mm)	SPACE (Separacion mm)	OVERLAP mm (Traspaso mm)
10	L 15*15-4.0*4.0	M-084	4.0 4.0	15 15
12	L 15*15-4.5*4.5	M-106	4.5 4.5	15 15

CONNECTED FOOTING (ZAPATAS CONECTADAS)

ZAPATA (FOOTING)	COLUMNA (COLUMN)	DIMENSIONS (DIMENSIONES)	REINFORCEMENT (REFUERZO)
Z1	A1, B1, C1, D1, A6, B6, C6, D6	1.1 1.1 0.35 275	6#4/19 L=1.35 6#4/19 L=1.35
Z2	A2, A3, A4, A5, D2, D3, D4, D5	1.2 1.2 0.35 275	7#4/17 L=1.45 7#4/17 L=1.45
Z3	B2, B3, B4, B5, C2, C3, C4, C5	1.4 1.4 0.35 275	6#4/15 L=1.65 6#4/15 L=1.65
Z4	B4-A1	0.8 0.8 0.35 275	5#4/17 L=1.10 5#4/17 L=1.10



THE DEPTH OF THE BED AND THE COMPACTATION GRADE MUST BE AS SPECIFIED ON SOIL SURVEY (LA PROFUNDIDAD DEL RECIPO Y EL GRADO DE COMPACTACION DEBE SER SEGUN LO ESPECIFICADO EN EL ESTUDIO DE SUELOS)



ESPECIFICACIONES
ACERO DE REFUERZO:
- fy= 4900 kgf/cm² (490MPa) para malla electrosoldada.
- fy= 4220 kgf/cm² (422MPa) para barras #3 y mayores.
- fy= 2600 kgf/cm² (260MPa) para barras #2.
CONCRETO ESTRUCTURAL:
- f'c= 210 kgf/cm² (21MPa) para columnas y vigas.
- f'c= 210 kgf/cm² (21MPa) para losas.

SPECIFICATIONS
REINFORCEMENT STEEL
- fy= 4900 kgf/cm² (490MPa) FOR ELECTROWELDED MESH.
- fy= 4220 kgf/cm² (422MPa) FOR #3 BARS AND BIGGER.
- fy= 2600 kgf/cm² (260MPa) FOR #2 BARS
STRUCTURAL CONCRETE
- f'c= 210 kgf/cm² (21MPa) FOR COLUMNS AND BEAMS
- f'c= 210 kgf/cm² (21MPa) FOR SLABS



EMBASSY OF THE UNITED STATES INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT BOGOTA, COLOMBIA

NOTICE: THIS DOCUMENT IS THE PROPERTY OF THE U.S. GOVERNMENT. FURTHER REPRODUCTION AND/OR DISTRIBUTION IS PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT SECTION, BOGOTA, COLOMBIA. INFORMATION ON THIS DOCUMENT IS NOT TO BE ALTERED EXCEPT WITH THE WRITTEN APPROVAL OF THE OFFICE.

MANAGED BY: I.N.L. INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT EMBASSY OF THE UNITED STATES BOGOTA, COLOMBIA

COR: ENGINEER FRANCISCO CABRERA

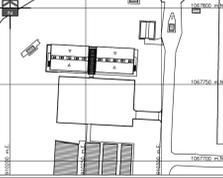
A & E DESIGN FIRM.



PROJECT: A&E DESIGN FOR A NEW LODGING BUILDING AT THE CNP AVIATION SCHOOL IN MARIQUITA, TOLIMA.

CONTRACT NUMBER: SCO150-13-M-0291 CONTRACT DATE: JANUARY 28, 2013

PURCHASE ORDER: SCO150-13-M-0291



LEGEND: NO LEGEND APPLY

OBSERVATIONS: ALL LEVELS AND DIMENSIONS MUST BE VERIFIED ON SITE BY THE BUILDING CONTRACTOR.

Table with 3 columns: No., SUBMITTAL, DATE. Lists 5 submittal items.

PHASE: 100% [] 85% [] 80% [] 90% [] 100% []

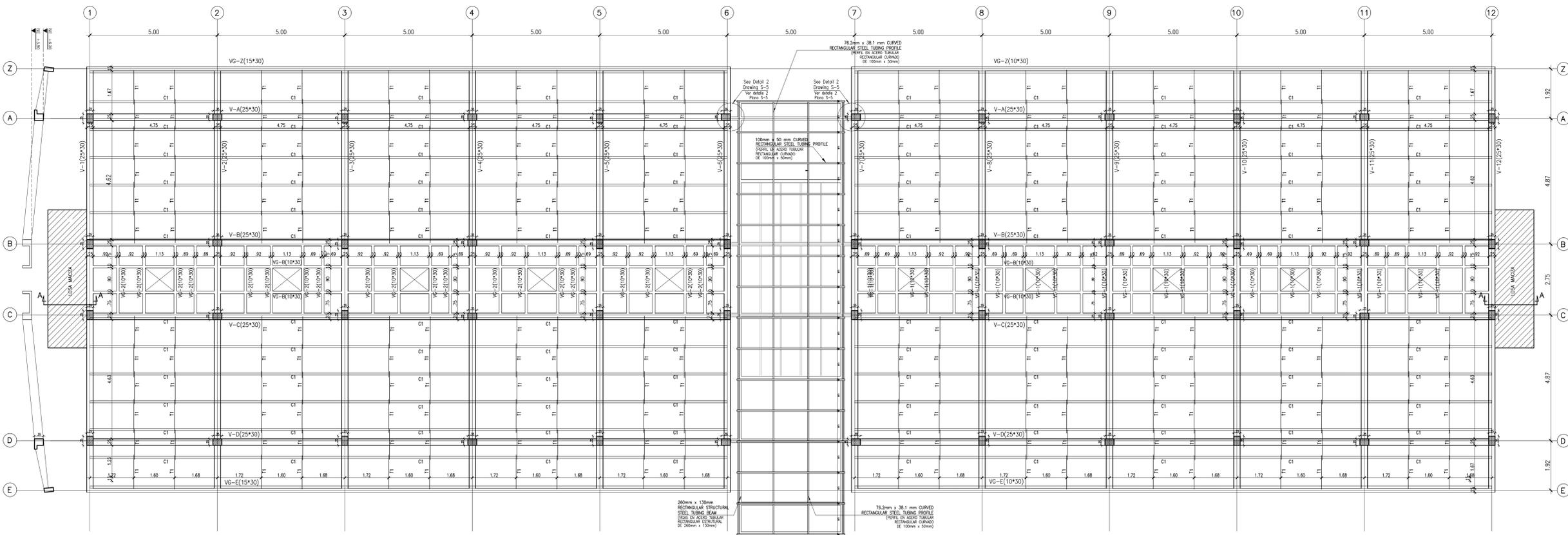
CONTENIDO: PLANTA DE CUBIERTA

CONTENTS: ROOF PLAN

SHEET: 77-S-1-2-3-4-5-6.dwg SCALE: IND

DESIGNED BY: [Signature] PROFESSION: Structural Engineer

DRAWING DATE: JUNE 13/2013



ROOF PLAN PLANTA CUBIERTAS LEVEL 2 / NIVEL 2

ESPECIFICACIONES DE CONCRETO ESTRUCTURAL ESPECIFICACIONES MATERIALES ACERO DE REFUERZO... CONCRETO ESTRUCTURAL... GENERALIDADES... CONTROL DE CALIDAD...

SPECIFICATIONS STRUCTURAL CONCRETE: SPECIFICATIONS MATERIALES REINFORCED STEEL... STRUCTURAL CONCRETE... OVERVIEW... QUALITY CONTROL... REINFORCED STEEL... STRUCTURAL CONCRETE...

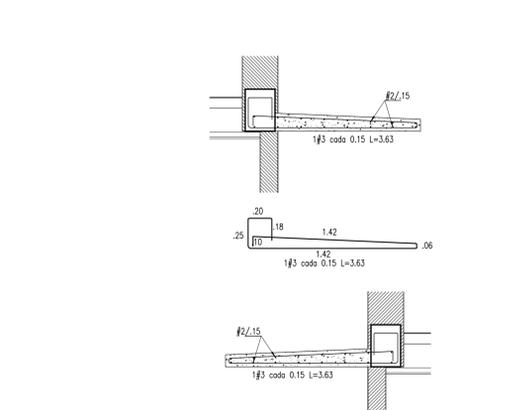
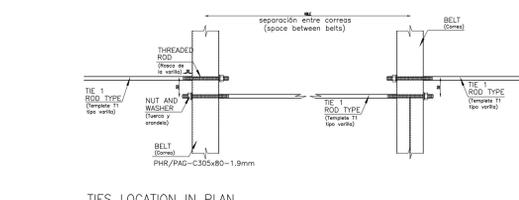
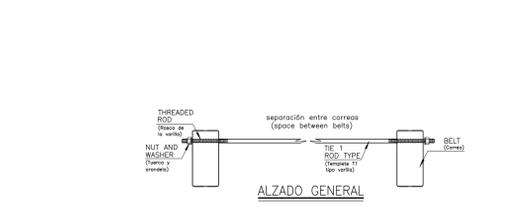
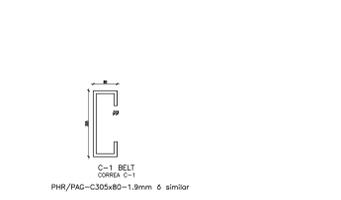


Table with 2 columns: COMPONENT, METAL SECTIONS. Lists components like C-1 BELT and their specifications.



METALLIC STRUCTURES SPECIFICATIONS DIMENSIONS IN MILLIMETERS MATERIALS STRUCTURAL METALLIC ELEMENTS SHALL BE MADE ON STRUCTURAL STEEL...

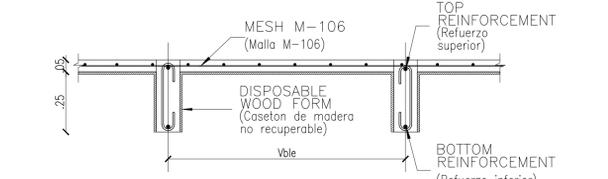
ESPECIFICACIONES ESTRUCTURAS METALICAS Dimensiones en milímetros MATERIALES Elementos metálicos estructurales con acero estructural con calidad ASTM-A36...

METALLIC ELEMENTS SPECIFICATIONS CONCRETE REINFORCED STEEL ACERO ESTRUCTURAL PROTECTION...

ESPECIFICACIONES PARA ELEMENTOS METALICOS MATERIALES Para todos los elementos estructurales Fc=21MPa ACERO DE REFUERZO...

NOTE: 0.10mm longitudinal welding lines must be left to determine the shape and size of the attaching plates.

NOTE: Se deberán dejar cordones de soldadura longitudinal mínima de 0.10mm, lo cual determinará la forma y tamaño de las placas de unión.



SLAB SECTION A-A' (SECCION LOSA A-A') Esc: 1:16



DETAIL LOCATION OF PIPES AND DUCTS CROSSING AND JOISTS BEAM DETALLE DE LOCALIZACION DE CONJUNTOS Y TUBERIAS QUE ATRAVIESAN VIGAS Y VIGUETAS Esc: 1:25

SPECIFICATIONS REINFORCEMENT STEEL ACERO DE REFUERZO CONCRETO ESTRUCTURAL

ESPECIFICACIONES ACERO DE REFUERZO CONCRETO ESTRUCTURAL



EMBASSY OF THE UNITED STATES
INTERNATIONAL NARCOTICS AND
LAW ENFORCEMENT
BOGOTÁ, COLOMBIA

NOTICE:
THIS DOCUMENT IS THE PROPERTY OF THE U.S. GOVERNMENT. FURTHER REPRODUCTION AND/OR DISTRIBUTION IS PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT SECTION, BOGOTÁ, COLOMBIA. INFORMATION ON THIS DOCUMENT IS NOT TO BE ALTERED EXCEPT WITH THE WRITTEN APPROVAL OF THE OFFICE.

MANAGED BY:
I.N.L.
INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT EMBASSY OF THE UNITED STATES
BOGOTÁ, COLOMBIA

COR:
ENGINEER FRANCISCO CABRERA

A & E DESIGN FIRM:



DIÁZ VILLEGAS ARQUITECTOS
www.diazvillegasarquitectos.com
TELEFONO: 2188907 - 2188809
ARQUITECTO JORGE DIAZ VILLEGAS

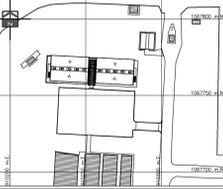
PROJECT:

A&E DESIGN FOR A NEW
LODGING BUILDING AT THE
CNP AVIATION SCHOOL IN
MARIQUITA, TOLIMA.

CONTRACT NUMBER: SCO150-13-M-0291 CONTRACT DATE: JANUARY 28, 2013

PURCHASE ORDER: SCO150-13-M-0291

LOCATION:



LEGEND:

NO LEGEND APPLY

OBSERVATIONS:
ALL LEVELS AND DIMENSIONS MUST BE VERIFIED ON SITE BY THE BUILDING CONTRACTOR.
ALL UNITS ARE IN METRIC SYSTEM.

REVISIONS:	No.	SUBMITTAL	DATE
	1	10% SUBMITTAL	12.02.2013
	2	35% SUBMITTAL	08.03.2013
	3	60% SUBMITTAL	08.03.2013
	4	90% SUBMITTAL	25.04.2013
	5	100% SUBMITTAL	13.06.2013

PHASE: 10% 35% 60% 90% 100%

CONTENIDO:
PLANTA DE ELEMENTOS NO ESTRUCTURALES

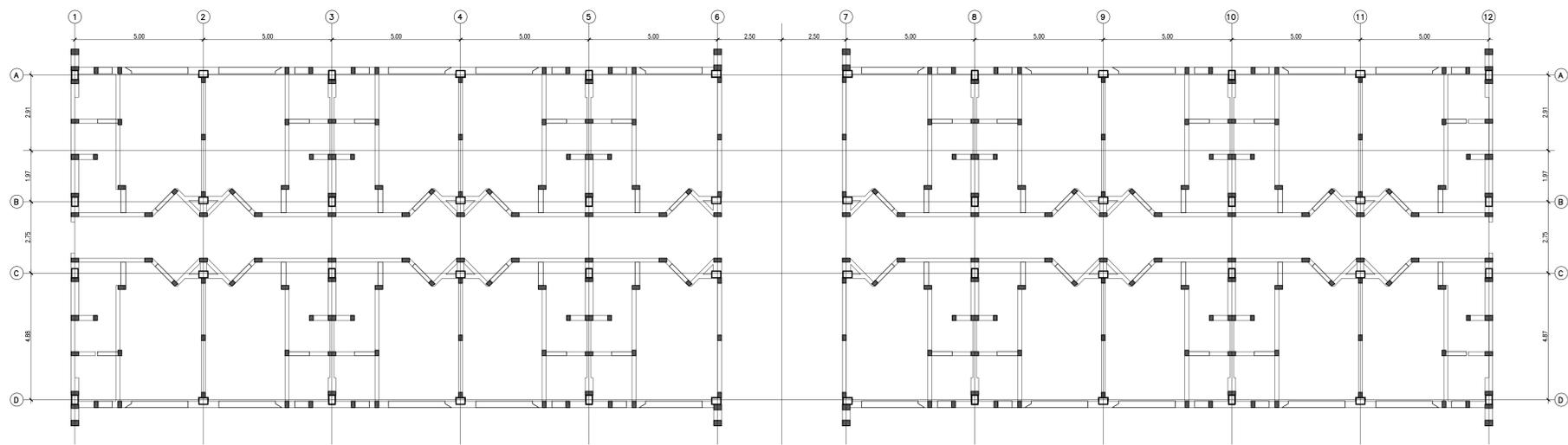
CONTENTS:
NON STRUCTURAL ELEMENTS PLAN

SHEET PLAN: 77-S-1-2-3-4-5-6.dwg SCALE: IND

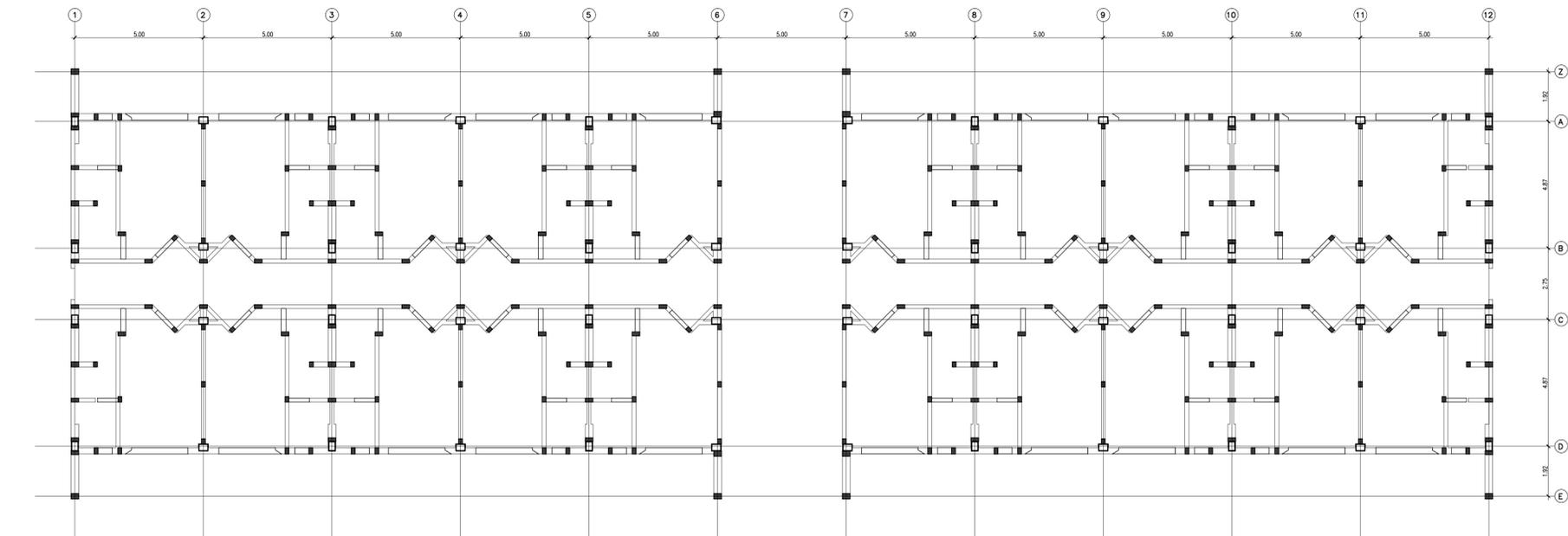
SHEET: **S-3** DESIGNED BY: **ANTHONY A. ANTONIO**

PROFESION: Structural Engineer PROFESSIONAL CARD: 05202 18878 ANT SIGNATURE:

DRAWING DATE: JUNE 13/2013



PLANT LOCATION OF NON STRUCTURAL COLUMNS AND LINTELS
PLANTA COLUMNETAS Y DINTELES



PLANT LOCATION OF NON STRUCTURAL COLUMNS AND LINTELS
PLANTA COLUMNETAS Y DINTELES

NO OPENINGS DIVISION WALLS DETAILS
DETALLES PARA MUROS DIVISORIOS SIN VANOS

ESPECIFICACIONES GENERALES PARA ELEMENTOS NO ESTRUCTURALES

ACERO DE REFUERZO:
-fy=420kg/cm²(60ksi) para barras #3 y mayores.
-fy=240kg/cm²(34ksi) para barras #2.
-El espesor de mortero de pega entre alambres #2 y #3 para de fy=420kg/cm²(60ksi) debe ser de 1.5 cm.
-El espesor de mortero de pega entre alambres #2 y #3 para de fy=240kg/cm²(34ksi) debe ser de 1.5 cm.
-Se prohíbe el uso del agregado grueso para elaboración del mortero de pega.

CONCRETO ESTRUCTURAL:
-f'c=210 kgf/cm²(3000 psi) columnas, columnetas.

MORTEROS:
-fy=125 kgf/cm²(1800 psi) morteros tipo #3 para mortero de pega.
-fy=175 kgf/cm²(2500 psi) morteros tipo #2 para mortero de pega.
-El espesor de mortero de pega entre alambres #2 y #3 para de fy=125 kgf/cm²(1800 psi) debe ser de 1.5 cm.
-El espesor de mortero de pega entre alambres #2 y #3 para de fy=175 kgf/cm²(2500 psi) debe ser de 1.5 cm.
-Se prohíbe el uso del agregado grueso para elaboración del mortero de pega.

LANTERAS:
-Se usará ladrillo de arcilla de perforación horizontal con una resistencia a la compresión de f'c=10kg/cm²(1430 psi) medido sobre el área neta.
-Se usará ladrillo de arcilla de perforación vertical con una resistencia a la compresión de f'c=10kg/cm²(1430 psi) medido sobre el área neta.
-La resistencia para muros de unidades de perforación vertical (f'c=10kg/cm²(1430 psi) medido sobre el área neta).
-La resistencia para muros de unidades de perforación horizontal (f'c=10kg/cm²(1430 psi) medido sobre el área neta).

GENERALIDADES:
-Grupo de uso I.
-Capacidad de disipación de energía moderada (EM).
-Zona de amenaza sísmica intermedia.
-Debe ser especificado según el caso para cada elemento.
-La longitud de la barra debe ser la especificada.
-Debe ser especificado según el caso para cada elemento.
-No se permite ningún cambio estructural de la subdivisión resultante de ingeniería civil.
-Si se requiere debe cumplir A-9 de las NBR-10.
-El mazo debe ser HT 1550 de HSLA o similar.

CONTROL DE CALIDAD:
-Se debe especificar el control de calidad de las NBR-10.
-MUESTRAS: Una muestra (3 muestras) por cada 500 m² de mampostería (28 días).
-UNIDADES: Una muestra (2 unidades) por cada 200 m² de mazo controlado.
-MORTEROS DE PEGA: Una muestra de 4 cilindros de 3" (2" x 7" día y 2" x 28" día) por cada 200 m² de mazo.
-MORTEROS DE UNIDADES: Una muestra de 4 cilindros de 3" (2" x 7" día y 2" x 28" día) por cada 100 m² de mampostería.
-Deben realizarse ensayos sobre muestras representativas de las unidades ensayadas en la construcción.

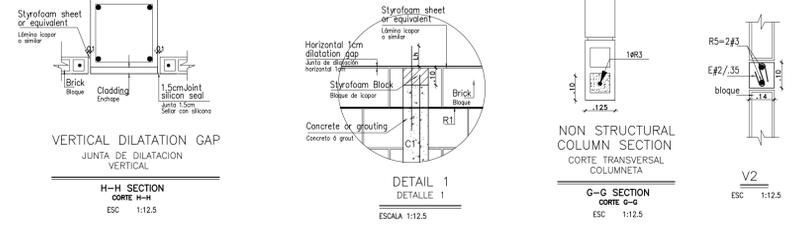
REINFORCEMENT STEEL:
-Without exception concrete must comply with chapters C4 and C5 of NBR-10.
-One sample for every 40m³ of cast concrete.
-One sample for every 200m² of wall area.
-Every sample consist of 6 cylinders (2 must be tested in 7 days, 2 must be tested in 28 days and 2 on break up).
-It is recommended to take samples from columns of 2 cylinders to be test after 24 hours (ACCREDITED LABS).
-Take on representative samples of materials used on the construction must be done.

STRUCTURAL CONCRETE:
-Without exception concrete must comply with chapters C4 and C5 of NBR-10.
-One sample for every 40m³ of cast concrete.
-One sample for every 200m² of wall area.
-Every sample consist of 6 cylinders (2 must be tested in 7 days, 2 must be tested in 28 days and 2 on break up).
-It is recommended to take samples from columns of 2 cylinders to be test after 24 hours (ACCREDITED LABS).
-Take on representative samples of materials used on the construction must be done.

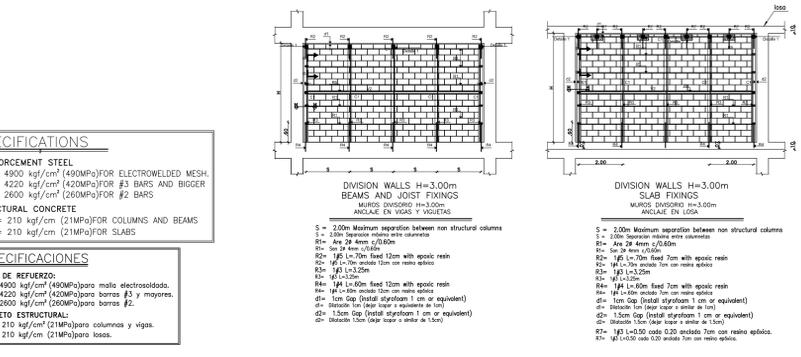
NOTE: ARCHITECTURAL PLANS MUST MATCH STRUCTURAL PLANS ANY INCONSISTENCY MUST BE CONSULTED WITH THE STRUCTURAL ENGINEER.

BEFORE THE BEGINNING OF THE WORKS THE FOUNDATION PLANS AND THE FOUNDATION SOIL MUST BE APPROVED BY THE SOIL ENGINEER.

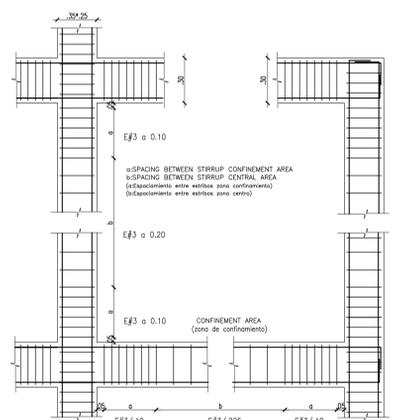
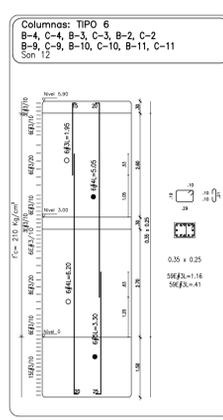
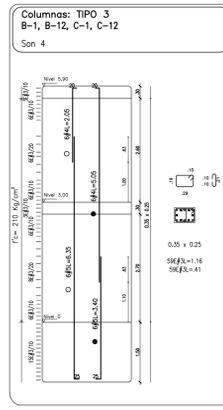
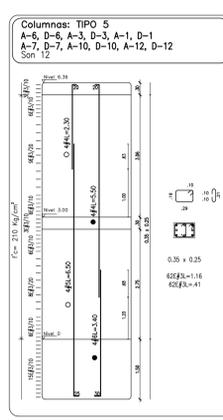
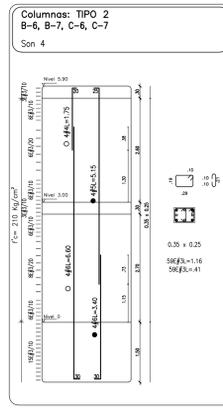
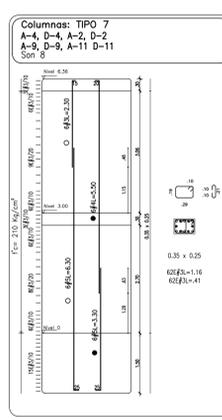
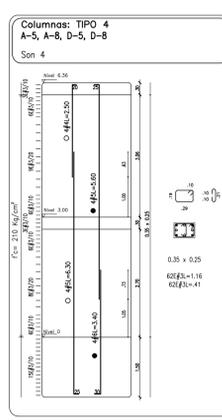
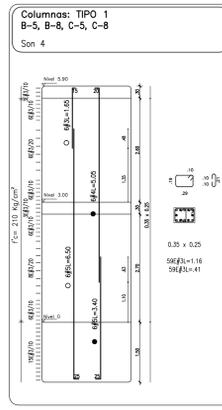
ANTES DE LA EJECUCION DEL PROYECTO LOS PLANOS Y EL SUELO DE CIMENTACION DEBEN CONTAR CON LA APROBACION DEL INGENIERO DE SUELOS.



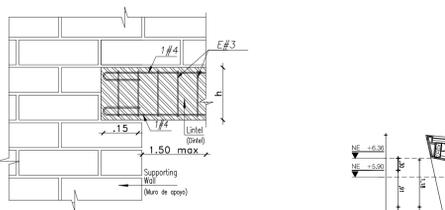
VERTICAL DILATATION GAP
JUNTA DE DILATACION VERTICAL



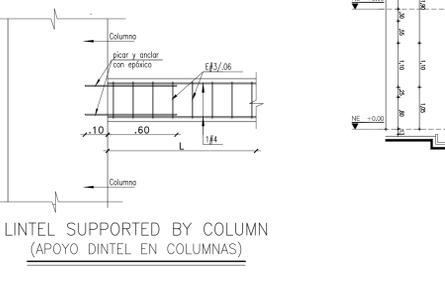
DETALLES PARA MUROS DE FACHADA Y DIVISORIOS
DETALLES PARA MUROS DE FACHADA Y DIVISORIOS



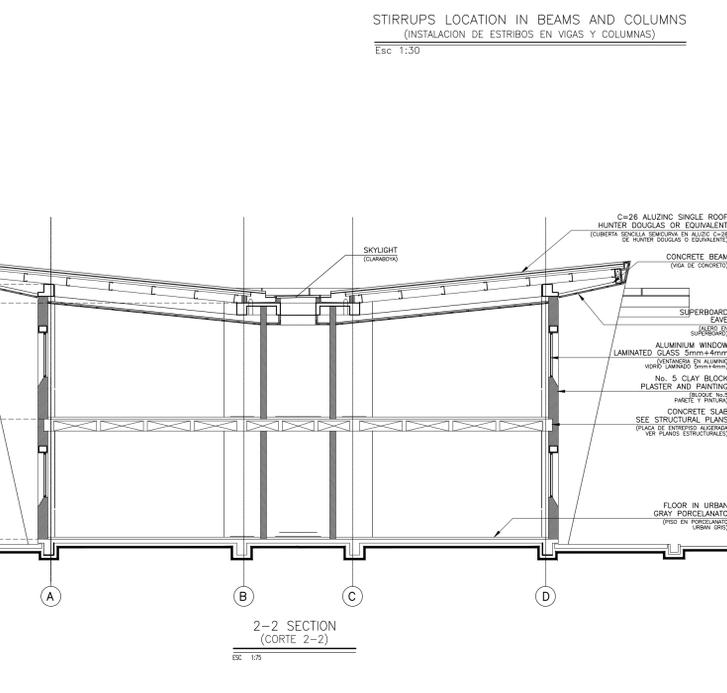
STIRRUPS LOCATION IN BEAMS AND COLUMNS
(INSTALACION DE ESTRIBOS EN VIGAS Y COLUMNAS)



LINTEL SUPPORTED BY WALL
(APOYO DINTEL EN MURO)



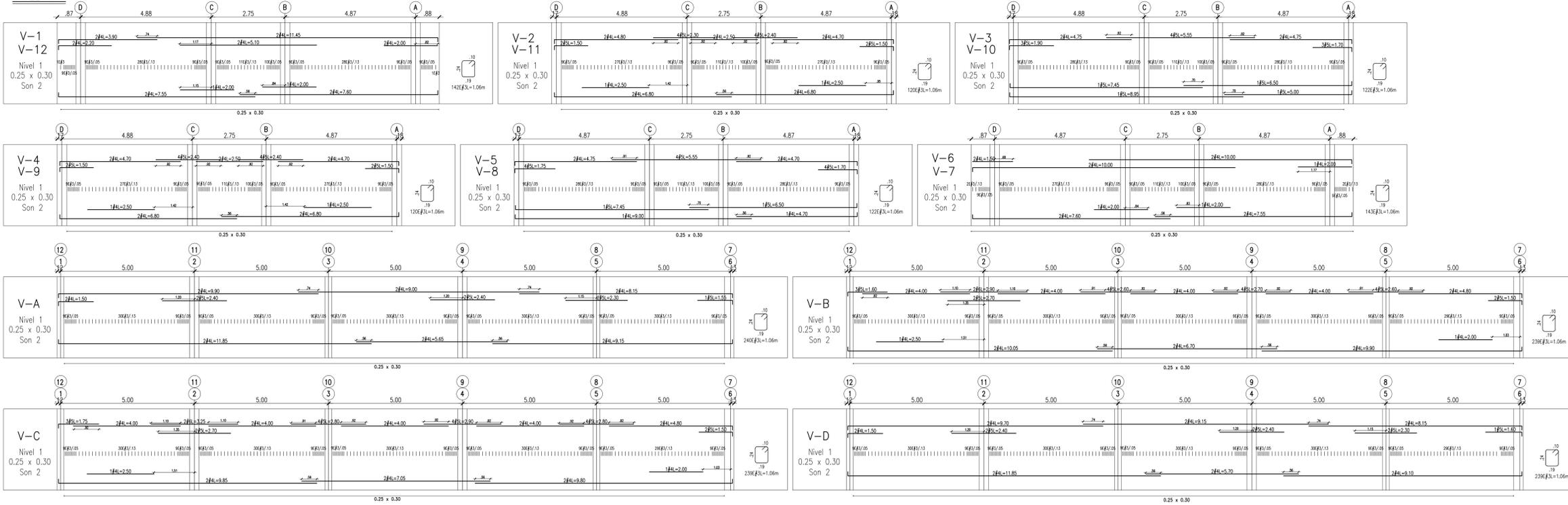
LINTEL SUPPORTED BY COLUMN
(APOYO DINTEL EN COLUMNAS)



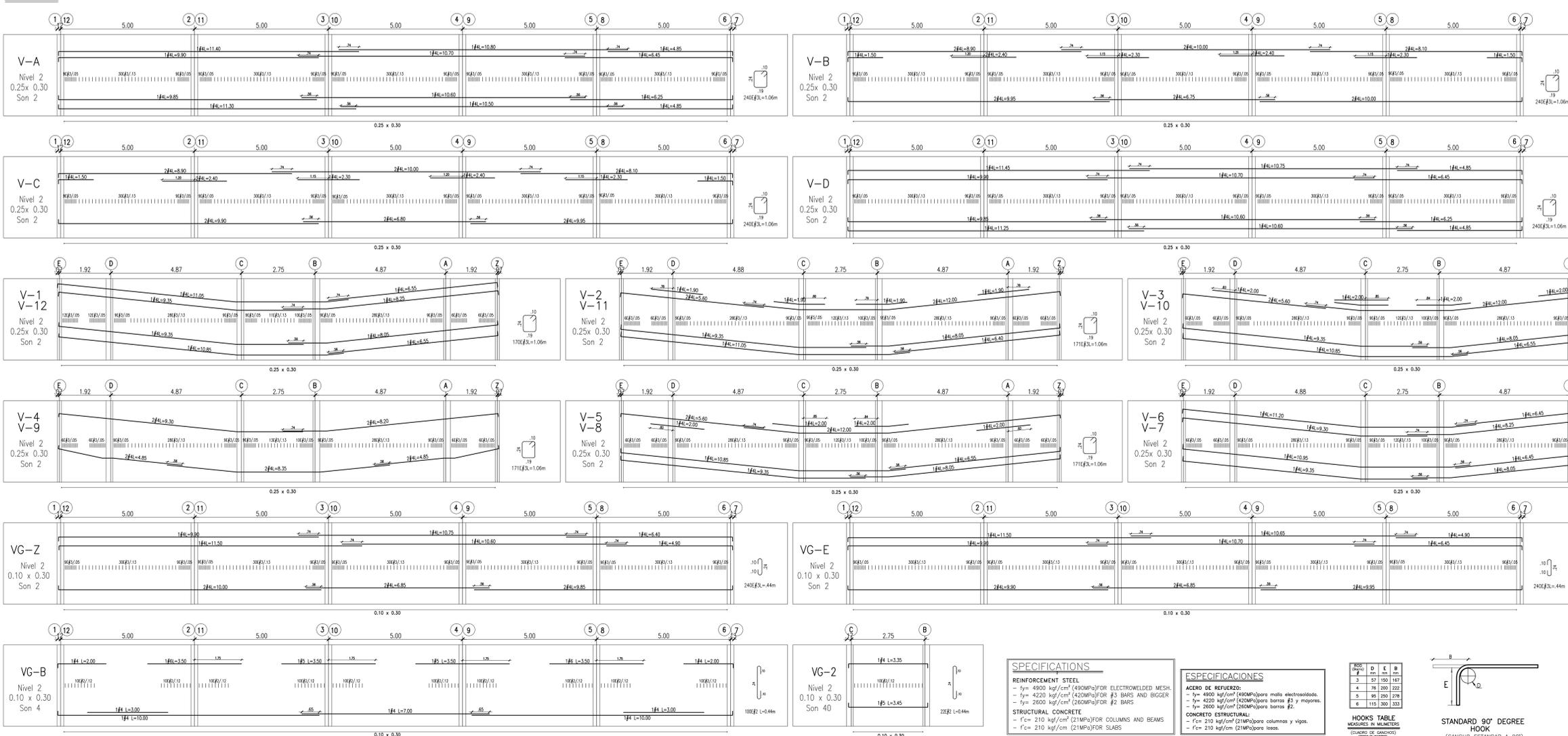
2-2 SECTION
(CORTE 2-2)

BEAMS AND JOISTS DETAILS
DESPIECE VIGAS Y VIGUETAS

LEVEL 1
NIVEL 1



LEVEL 2
NIVEL 2

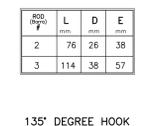
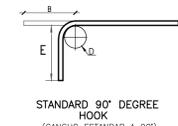


SPECIFICATIONS
 REINFORCEMENT STEEL
 - fy = 4900 kgf/cm² (490MPa) FOR ELECTROWELDED MESH.
 - fy = 4220 kgf/cm² (420MPa) FOR #3 BARS AND BIGGER
 - fy = 2600 kgf/cm² (260MPa) FOR #2 BARS
 STRUCTURAL CONCRETE
 - f'c = 210 kgf/cm² (21MPa) FOR COLUMNS AND BEAMS
 - f'c = 210 kgf/cm² (21MPa) FOR SLABS

ESPECIFICACIONES
 ACERO DE REFUERZO:
 - fy = 4900 kgf/cm² (490MPa) para mallas electrosoldadas.
 - fy = 4220 kgf/cm² (420MPa) para barras #3 y mayores.
 - fy = 2600 kgf/cm² (260MPa) para barras #2
 CONCRETO ESTRUCTURAL:
 - f'c = 210 kgf/cm² (21MPa) para columnas y vigas.
 - f'c = 210 kgf/cm² (21MPa) para losas.

HOOKS TABLE
 MEASURES IN MILLIMETERS
 (MEDIDAS EN CENTIMETROS)

HOOK	D	E	B
1	3	57	190
2	4	76	252
3	5	95	278
4	6	115	303



EMBASSY OF THE UNITED STATES
INTERNATIONAL NARCOTICS AND
LAW ENFORCEMENT
BOGOTA, COLOMBIA

NOTICE:
THIS DOCUMENT IS THE PROPERTY OF THE U.S. GOVERNMENT. FURTHER REPRODUCTION AND/OR DISTRIBUTION IS PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT SECTION, BOGOTA, COLOMBIA. INFORMATION ON THIS DOCUMENT IS NOT TO BE ALTERED EXCEPT WITH THE WRITTEN APPROVAL OF THE OFFICE.

MANAGED BY:
I.N.L.
INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT EMBASSY OF THE UNITED STATES, BOGOTA, COLOMBIA

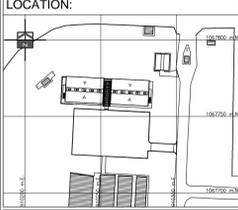
COR:
ENGINEER FRANCISCO CABRERA

A & E DESIGN FIRM:



PROJECT:
A&E DESIGN FOR A NEW LODGING BUILDING AT THE CNP AVIATION SCHOOL IN MARIQUITA, TOLIMA.

CONTRACT NUMBER: SC0150-13-M-0291
CONTRACT DATE: JANUARY 28, 2013
PURCHASE ORDER: SC0150-13-M-0291



LEGEND:
NO LEGEND APPLY

OBSERVATIONS:
ALL LEVELS AND DIMENSIONS MUST BE VERIFIED ON SITE BY THE BUILDING CONTRACTOR.
ALL UNITS ARE IN METRIC SYSTEM.

REVISIONS:

No.	SUBMITTAL	DATE
1	10% SUBMITTAL	12.02.2013
2	35% SUBMITTAL	08.03.2013
3	60% SUBMITTAL	08.03.2013
4	90% SUBMITTAL	25.04.2013
5	100% SUBMITTAL	13.06.2013

PHASE: 10% 35% 60% 90% 100%

CONTENIDO:
DESPIECE DE VIGAS

CONTENTS:

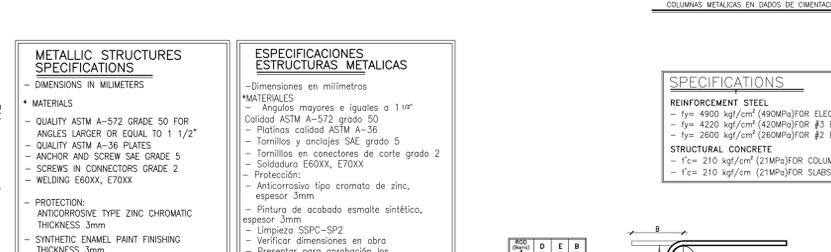
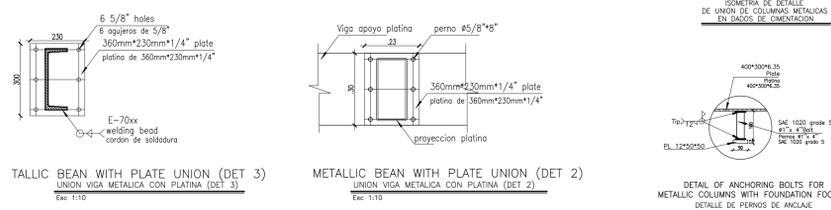
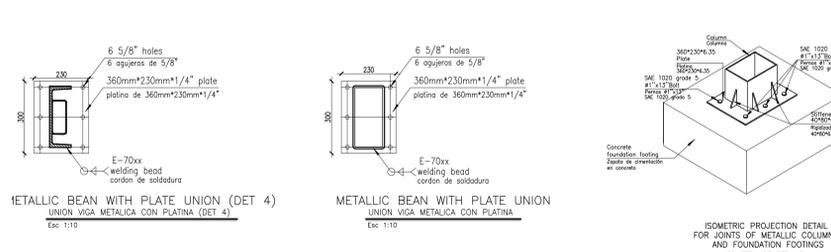
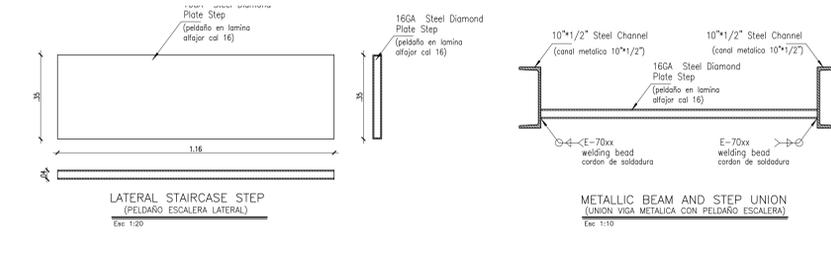
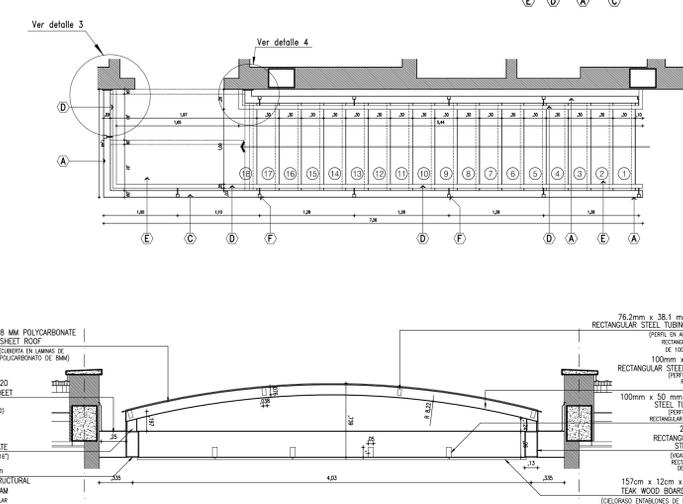
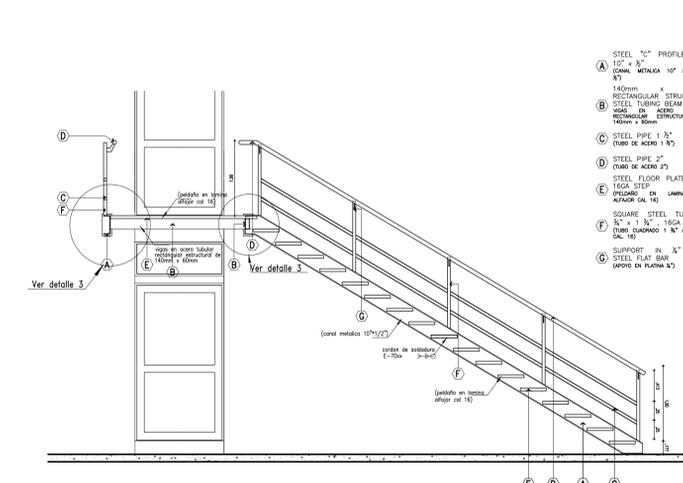
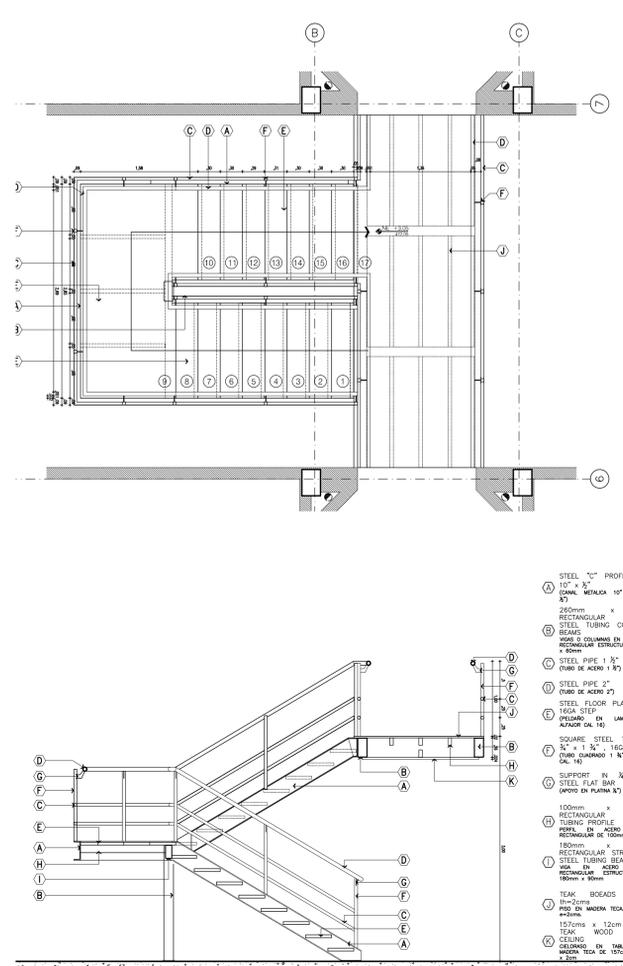
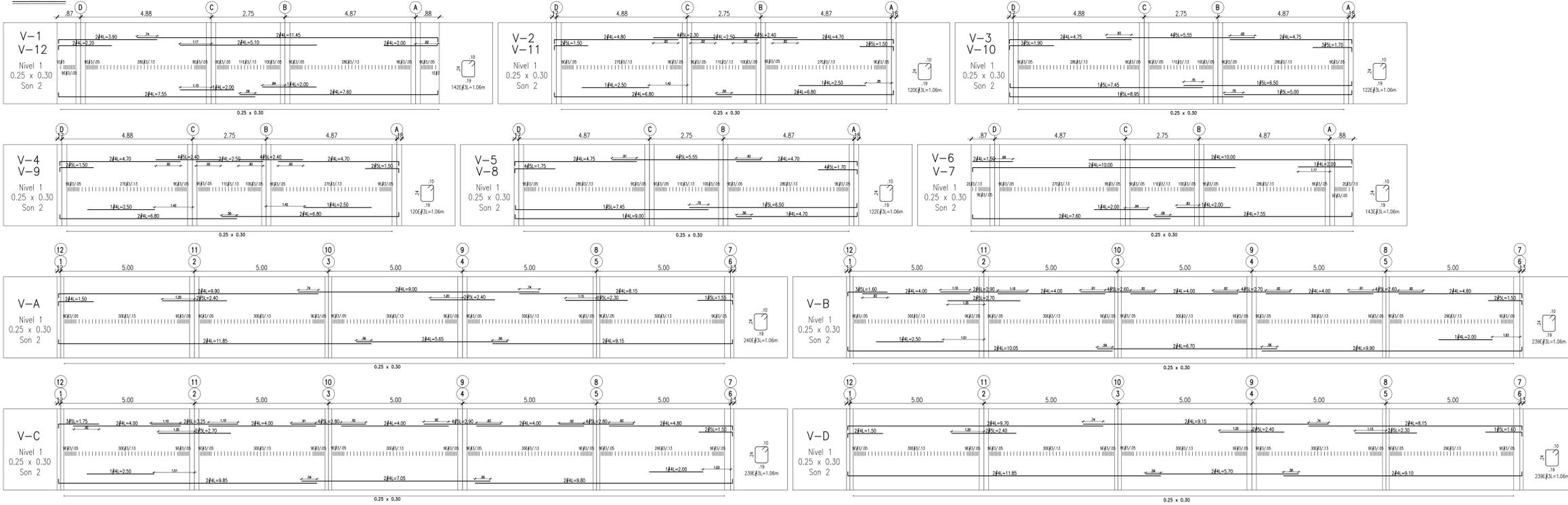
SHEET PLAN: 77-S-1-2-3-4-5-6.dwg SCALE: IND

SHEET: DESIGNED BY: **S-4**
PROFESSOR: **S-4**
STRUCTURAL ENGINEER
PROFESSIONAL CARD: 05202 18878 ANT
SIGNATURE:

DRAWING DATE: JUNE 13/2013

BEAMS AND JOISTS DETAILS
DESPIECE VIGAS Y VIGUETAS

LEVEL 1
NIVEL 1

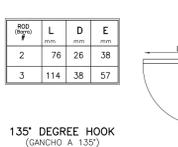
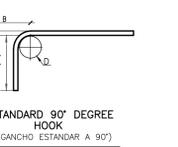


METALLIC STRUCTURES SPECIFICATIONS
- DIMENSIONS IN MILLIMETERS
- MATERIALS
- QUALITY ASTM A-572 GRADE 50 FOR ANGLES LARGER OR EQUAL TO 1 1/2\"/>

ESPECIFICACIONES ESTRUCTURAS METALICAS
- Dimensiones en milímetros
- MATERIALES
- Ángulos mayores e iguales a 1 1/2\"/>

SPECIFICATIONS
REINFORCEMENT STEEL
- fy= 4900 kgf/cm² (490MPa) FOR ELECTROWELDED MESH
- fy= 4220 kgf/cm² (420MPa) FOR #3 BARS AND BIGGER
- fy= 2800 kgf/cm² (280MPa) FOR #2 BARS

ESPECIFICACIONES
ACERO DE REFUERZO:
- fy= 4900 kgf/cm² (490MPa) para malla electrosoldada.
- fy= 4220 kgf/cm² (420MPa) para barras #3 y mayores.
- fy= 2800 kgf/cm² (280MPa) para barras #2.



EMBASSY OF THE UNITED STATES
INTERNATIONAL NARCOTICS AND
LAW ENFORCEMENT
BOGOTÁ, COLOMBIA

NOTICE:
THIS DOCUMENT IS THE PROPERTY OF THE U.S. GOVERNMENT. FURTHER REPRODUCTION AND/OR DISTRIBUTION IS PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT SECTION, BOGOTÁ, COLOMBIA. INFORMATION ON THIS DOCUMENT IS NOT TO BE ALTERED EXCEPT WITH THE WRITTEN APPROVAL OF THE OFFICE.

MANAGED BY:
I.N.L.
INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT EMBASSY OF THE UNITED STATES
BOGOTÁ, COLOMBIA

COR:
ENGINEER FRANCISCO CABRERA

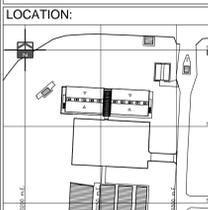
A & E DESIGN FIRM:



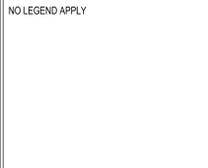
PROJECT:
A&E DESIGN FOR A NEW LODGING BUILDING AT THE CNP AVIATION SCHOOL IN MARIQUITA, TOLIMA.

CONTRACT NUMBER: SC0150-13-M-0291
CONTRACT DATE: JANUARY 28, 2013

PURCHASE ORDER: SC0150-13-M-0291



LEGEND:
NO LEGEND APPLY



OBSERVATIONS:
ALL LEVELS AND DIMENSIONS MUST BE VERIFIED ON SITE BY THE BUILDING CONTRACTOR.
ALL UNITS ARE IN METRIC SYSTEM.

REVISIONS:

No.	SUBMITTAL	DATE
1	10% SUBMITTAL	12.02.2013
2	35% SUBMITTAL	08.03.2013
3	60% SUBMITTAL	08.03.2013
4	90% SUBMITTAL	28.04.2013
5	100% SUBMITTAL	13.06.2013

PHASE:
 10% 35% 60% 90% 100%

CONTENIDO:
DESPIECE DE VIGAS
DETALLES DE ESTRUCTURAS METALICAS

CONTENTS:
BEAMS DETAILING
METAL STRUCTURE DETAILS

SHEET PLAN:
77-S-1-2-3-4-5-6.dwg SCALE: IND

SHEET:
DESIGNED BY:
PROFESSOR:
STRUCTURAL ENGINEER

S-5
05202 18878 ANT
SIGNATURE:

DRAWING DATE:
JUNE 13/2013



EMBASSY OF THE UNITED STATES
INTERNATIONAL NARCOTICS AND
LAW ENFORCEMENT
BOGOTA, COLOMBIA

NOTICE:
THIS DOCUMENT IS THE PROPERTY OF THE U.S. GOVERNMENT. FURTHER REPRODUCTION AND/OR DISTRIBUTION IS PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT SECTION, BOGOTA, COLOMBIA. INFORMATION ON THIS DOCUMENT IS NOT TO BE ALTERED EXCEPT WITH THE WRITTEN APPROVAL OF THE OFFICE.

MANAGED BY:
I.N.L.
INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT EMBASSY OF THE UNITED STATES
BOGOTA, COLOMBIA

COR:
ENGINEER FRANCISCO CABRERA

A & E DESIGN FIRM:



DIAZ VILLEGAS ARQUITECTOS
www.diazvillegasarquitectos.com
TELEFONO: 2188907 - 2188809
ARQUITECTO JORGE DIAZ VILLEGAS

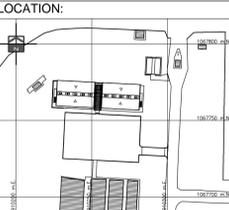
PROJECT:

A&E DESIGN FOR A NEW
LODGING BUILDING AT THE
CNP AVIATION SCHOOL IN
MARIQUITA, TOLIMA.

CONTRACT NUMBER: SC0150-13-M-0291 CONTRACT DATE: JANUARY 28, 2013

PURCHASE ORDER: SC0150-13-M-0291

LOCATION:



LEGEND:

NO LEGEND APPLY

OBSERVATIONS:
ALL LEVELS AND DIMENSIONS MUST BE VERIFIED ON SITE BY THE BUILDING CONTRACTOR.
ALL UNITS ARE IN METRIC SYSTEM.

REVISIONS:	No.	SUBMITTAL	DATE
	1	10% SUBMITTAL	12.02.2013
	2	35% SUBMITTAL	08.03.2013
	3	60% SUBMITTAL	08.03.2013
	4	90% SUBMITTAL	25.04.2013
	5	100% SUBMITTAL	13.06.2013

PHASE: 10% 35% 60% 90% 100%

CONTENIDO:
AREA TECNICA
PLANTAS ESTRUCTURALES Y
DETALLES GENERALES

CONTENTS:
TECHNICAL AREA
STRUCTURAL PLANS
GENERAL DETAILS

SHEET PLAN: 77-S-1-2-3-4-5-6.dwg SCALE: IND

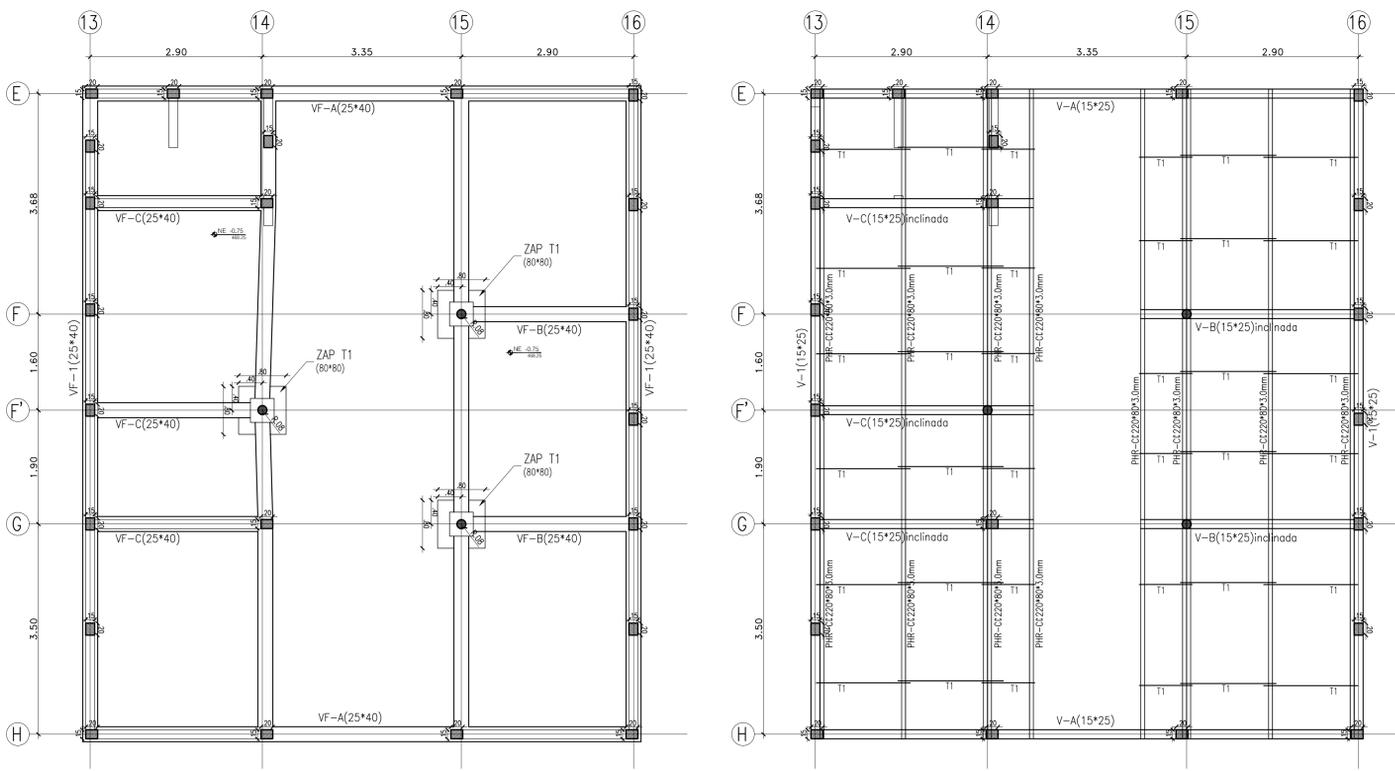
SHEET: DESIGNED BY: **S-6** **J. A. S.** **A&E**

PROFESSOR: Structural Engineer

PROFESSIONAL CARD: 05202 18878 ANT

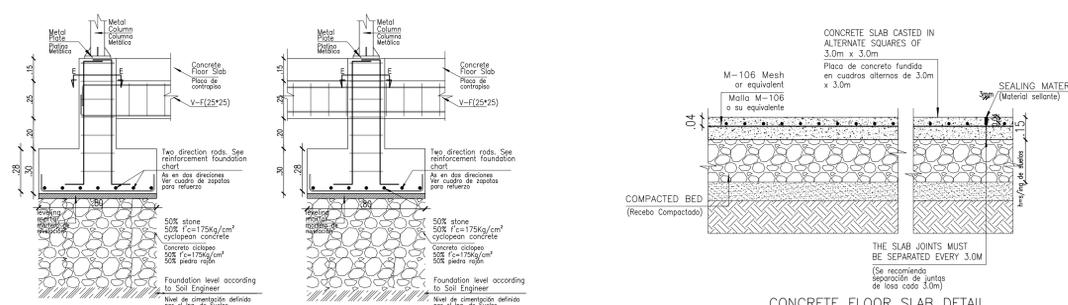
SIGNATURE:

DRAWING DATE: JUNE 13/2013



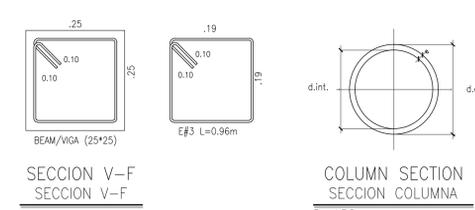
FOUNDATION PLAN
PLANTA DE CIMENTACIÓN
Foundation Level
(Nivel Cim)

ROOF PLAN
PLANTA DE CUBIERTA
Roof Level
(Nivel Cub)



CONCRETE FLOOR SLAB DETAIL
(DETALLE PLACA CONTRAPISO)
Esc: 1:20

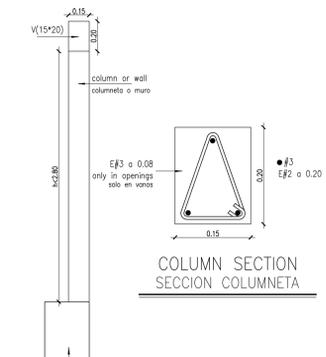
ISOLATED FOOTING FOR METAL COLUMN
ZAPATA AISLADA PARA COLUMNA METALICA
Esc: 1:20



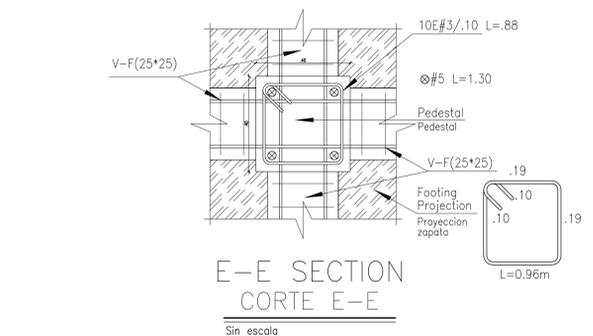
SECCION V-F
SECCION V-F
Esc: 1:7.5

COLUMN SECTION
SECCION COLUMNA
Esc: 1:7.5

ZAPATA (FOOTING)	COLUMN (COLUMNA)	DIMENSIONS (DIMENSIONES)				REINFORCEMENT (REFUERZO)		
		B(m)	L(m)	H(m)	d(m)	Asa	AsL	AsT
1	E-13, F-13, G-13, H-13 E-14, F-14, G-14, H-14	0.80	0.80	0.30	0.225	6#4/15 L=1.14	6#4/15 L=1.14	



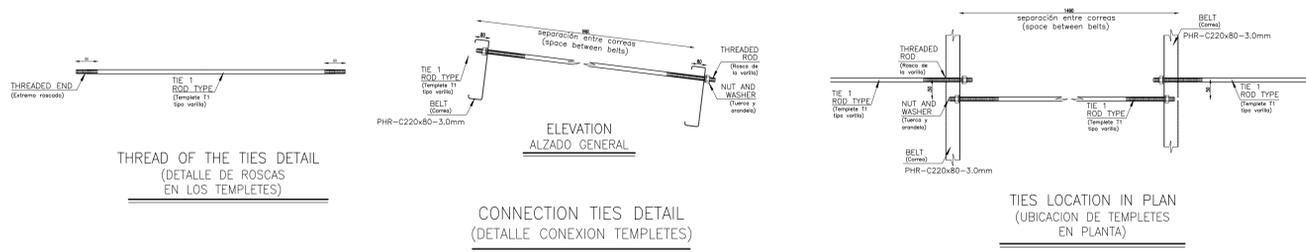
CONFINED WALL-COLUMN DETAIL
DETALLE MURO CONFINADO-COLUMNETA
Esc: 1:20



E-E SECTION
CORTE E-E
Sin escala

TYPE TIPO	Diameter Diámetro		
	Nominal pulgadas	Exterior, d (cm)	Interior, d (cm)
TUBE Perfil circular	6"	16.83	15.41
ESPECIFICACIONES COLUMNAS METALICAS			Espeor de pared, e=(mm)
			7,112

NOTE: ALL METAL COLUMNS MUST BE FILLED WITH f'c:210 Kg/cm² concrete
NOTA: TODAS LAS COLUMNAS METALICAS DEBEN IR RELENAS DE CONCRETO f'c: 210 Kg/cm²

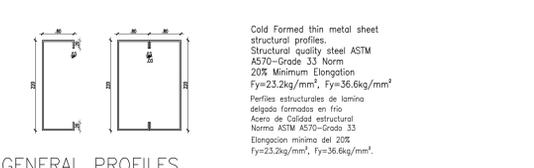


THREAD OF THE TIES DETAIL
(DETALLE DE ROSCAS EN LOS TEMPLETES)

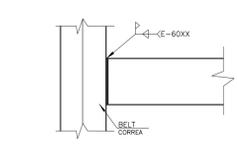
CONNECTION TIES DETAIL
(DETALLE CONEXION TEMPLETES)

TIES LOCATION IN PLAN
(UBICACION DE TEMPLETES EN PLANTA)

ELEMENT ELEMENTO	PROFILE PERFIL
1	PHR-C 220*80*3.0 mm or equivalent PHR-C 220*80*3.0 mm o equivalente
T1	Ø3/8" straight rod tie Templete tipo Varilla Ø3/8" liso



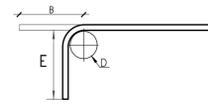
ROOF ELEMENTS GENERAL PROFILES
PERFILERIA GENERAL ELEMENTOS DE CUBIERTA
Sin escala



ROOF BEAMS UNION DETAILS
DETALLE DE UNIONES CUBIERTA
ESC NONE

ROD (BARRA)	D (mm)	E (mm)	B (mm)
3	57	150	167
4	76	200	222
5	95	250	278
6	115	300	333

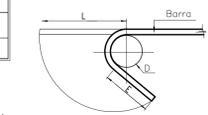
HOOKS TABLE
MEASURES IN MILLIMETERS
(MEDIDAS EN MILIMETROS)



STANDARD 90° DEGREE HOOK
(GANCHO ESTANDAR A 90°)

ROD (BARRA)	L (mm)	D (mm)	E (mm)
2	76	26	38
3	114	38	57

135° DEGREE HOOK
(GANCHO A 135°)



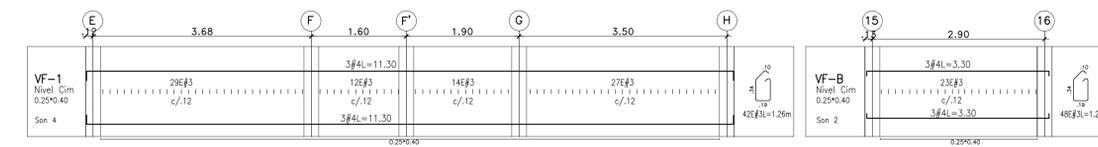
SPECIFICATIONS
REINFORCEMENT STEEL
- fy= 4900 kgf/cm² (490MPa) FOR ELECTROWELDED MESH.
- fy= 4220 kgf/cm² (420MPa) FOR #3 BARS AND BIGGER
- fy= 2650 kgf/cm² (260MPa) FOR #2 BARS
STRUCTURAL CONCRETE
- f'c= 210 kgf/cm (21MPa) FOR COLUMNS AND BEAMS
- f'c= 210 kgf/cm (21MPa) FOR SLABS

ESPECIFICACIONES
ACERO DE REFUERZO:
- fy= 4900 kgf/cm² (490MPa) para malla electrosoldada.
- fy= 4200 kgf/cm² (420MPa) para barras #3 y mayores.
- fy= 2600 kgf/cm² (260MPa) para barras #2.
CONCRETO ESTRUCTURAL:
- f'c= 210 kgf/cm² (21MPa) para columnas y vigas.
- f'c= 210 kgf/cm² (21MPa) para losas.

METALLIC STRUCTURES SPECIFICATIONS
- DIMENSIONS FOR METALLIC PROFILES IN MILLIMETERS
* MATERIALS
- QUALITY ASTM A-500 GRADE C
Fy=3220 kg/cm² For #6" STEEL PIPE
Fy=3220kg/cm²
- QUALITY ASTM A-36 PLATES
- ANCHOR AND SCREW SAE GRADE 5
- SCREWS IN CONNECTORS GRADE 2
- WELDING E60XX, E70XX
- PROTECTION:
- ANTICORROSIONE TYPE ZINC CHROMATIC THICKNESS 3mil
- SYNTHETIC ENAMEL PAINT FINISHING THICKNESS 3mil
- CLEANING SSPC-SP2
- VERIFY DIMENSIONS ON WORK SITE
- SUBMIT FOR APPROVAL WELDING PROCEDURES AND QUALIFICATION WELDERS
- SUBMIT FOR APPROVAL WORKSHOP AND ASSEMBLY DRAWINGS
- SUBMIT FOR APPROVAL CONSTRUCTION PROCEDURES

ESPECIFICACIONES ESTRUCTURAS METALICAS
- Dimensiones para perfiles metalicos en milimetros
* MATERIALES
- Perfiles circulares de #6"
Calidad ASTM A-500 grade C
Fy=3220kg/cm²
- Platinas calidad ASTM A-36
- Tornillos y arandelas SAE grado 5
- Tornillos en conectores de corte grado 2
- Soldadura E60XX, E70XX
- Protección:
- Anticorrosivo tipo cromato de zinc, espesor 3mil
- Pintura de acabado esmalte sintético, espesor 3mil
- Limpieza SSPC-SP2
- Verificar dimensiones en obra
- Presentar para aprobación los procedimientos de soldadura y calificación de soldadores
- Presentación para aprobación los planos de taller y montaje
- Presentación para aprobación los procedimientos de construcción

BEAMS DETAILS FOUNDATION LEVEL
DESPIECE DE VIGAS NIVEL CIM



DESPIECE DE VIGAS NIVEL CUB

